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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,228	10/20/2003	Philip O. Gerard	LAC03 P329	3942

277 7590 02/18/2005

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EXAMINER
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BELLINGER, JASON R

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/689,228

Applicant(s)

GERARD, PHILIP O.

Examiner

Jason R Bellinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Allowable Subject Matter***

1. The indicated allowability of claims 4-13, 17-18, and 20-23 is withdrawn in view of the newly discovered reference(s) to Baba and Shirai et al. Rejections based on the newly cited reference(s) follow.

***Drawings***

2. The drawings were received on 12 November 2004. These drawings are approved.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "centrally located portion of each finger having a first radius of curvature, and the abutment portion of each finger having a second radius of curvature less than that of the first radius of curvature", the "second radius of curvature being substantially similar to an inner radius of the annular locking ring of the hub", the "circumferentially extending rim of the cap abutting the outer surface of the wheel", and the "locking nub of each finger of the cover engaging the locking ring of the hub" as set forth in claims 2-5, 8, 11-12, 14-15, 17-20, 22-23, 25, and 27, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

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prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

4. Claim 6 is objected to because of the following informalities: The term "condition" should be replaced with the term --position-- in order to correspond to the previous description of the invention set forth in claim 4 from which claim 6 depends. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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6. Claims 2-5, 8, 11-12, 14-15, 17-20, 22-23, 25, and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The fingers of the center cap having a centrally located portion with a first radius and rounded abutment portions having a second radius of curvature that is less than the first radius of curvature has not been sufficiently described in the specification, or shown in the drawings. A generic statement in the "Summary of the Invention" does not constitute a full and clear disclosure of this aspect of the invention. Without a detailed description of this aspect of the invention, one of ordinary skill in the art would be unable to make and/or use the invention.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 12 recites the limitation "the second radius of curvature" in line 1. There is insufficient antecedent basis for this limitation in the claim. There is no support for this limitation in claim 11 or claim 1, from which claim 12 depends.

***Claim Rejections - 35 USC § 103***

**10.** The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**11.** Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba in view of Shirai et al. Baba shows a wheel 20 having an outer surface and a centrally located hub aperture 21 extending through the wheel 210, and a wheel center cap 10. The center cap 10 includes a body portion 11 and a plurality of flexibly resilient fingers 9 that extend substantially orthogonal to the body portion 11. Each finger includes a pair of side walls and an integrally formed outer wall that includes a centrally located portion 15 and an abutment portion 13 located proximate the side walls. The fingers 9 abut the hub aperture 21 when the wheel cap 10 is assembled with the wheel 20 by a snap-fit engagement.

Figure 6 shows the hub aperture 21 includes an interior wall and an annular locking ring that extends inwardly from the interior wall. Each finger 9 includes a locking nub 14a located along its length; the finger 9 being flexible between an assembly position (in which the locking nub 14a is aligned with the annular locking ring), and an assembled position (where the locking nub 14a is positioned behind the locking ring). The radius of curvature of the locking nub 14a, which in this case is zero, is substantially similar to the inner radius of the annular locking ring (which is also zero)

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when the fingers 9 are in the assembly position. The fingers 9 are flexed inwardly when in the assembled position.

The body portion 11 of the cap 10 is substantially planar, and includes a circumferentially extending rim 11a that abuts the outer surface of the wheel 20 when the fingers 9 are in the assembled position.

Baba does not show the centrally located portion of each finger having a first radius of curvature, and the abutment portion having a second radius of curvature that is different, namely less than, the first radius of curvature. Figure 21 of Shirai et al teaches the use of a wheel cap having a finger 104 with a centrally located portion with a first radius of curvature 104j, and an abutment portion 104a having a second radius of curvature 104k that is less than the first radius of curvature 104j. Figures 22a-22c show a flexibly resilient ring 102 that abuts an interior surface of each finger 104 to bias the finger 104 radially outwardly. The second radius of curvature 104k is substantially similar to the radius of curvature 108b of the wheel.

Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the fingers of Baba with first and second radii of curvature, with the second radius of curvature corresponding to a curved radius of the hub locking ring, for the purpose of reducing the amount of force required to assemble the wheel cap to the wheel, while still allowing for a secure snap-fit connection.

***Response to Arguments***

**12.** Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

**13.** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show wheel caps that engage a hub aperture of a wheel. For example, Enomoto et al shows a wheel cap of the type described above.

**14.** Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R Bellinger whose telephone number is 703-308-6298. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

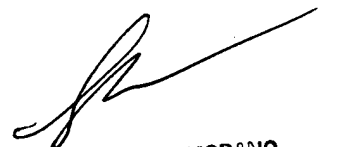
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger  
Examiner  
Art Unit 3617



jrb



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